The longevity factor

NICK SECRETT AND **CHARLES VAN DER WELLE** EXPLAIN WHY AND HOW ITV HEDGED LONGEVITY RISK IN ITS PENSION SCHEME.

In August 2011 ITV announced its pension scheme had entered into a longevity swap with Credit Suisse to remove the risk of increases in pension liabilities that would arise if a significant proportion of the scheme's defined benefit (DB) pensioner population were to enjoy a longer life than currently expected. The transaction was part of the company's long-term strategy to manage the risks and uncertainties associated with the scheme.

BACKGROUND ITV is the largest commercial television network in the UK, with revenues principally generated from advertising. Group external revenues in 2010 were £2,064m and EBITA before exceptional items was £408m. Based on a share price of 58p ITV's market capitalisation is around £2.3bn.

The business has been in existence for over 50 years, so the DB section of its pension scheme is relatively mature. As at 31 December 2010 the scheme's DB membership comprised 745 actives, 10,670 deferreds and 13,794 pensioners. Measured on an IAS 19 basis, scheme assets totalled £2,433m and liabilities £2,746m, resulting in a deficit of £313m. Main scheme assets comprised 51% bonds (including gilts, index-linked, corporate bonds and swaps), 37% equity-type assets and 12% in other return-seeking assets.

In 2009 ITV's group FD Ian Griffiths formed and chaired a pensions steering committee which included heads of HR, pensions and treasury. The purpose of the committee was to bring a more co-ordinated and pro-active approach to the company's strategy for pensions risk management and clearer focus to the already positive engagement with the scheme's trustees and their advisers.

LONGEVITY RISK To assist the committee PwC was appointed pensions adviser to the company and produced an analysis of the current position that enabled the steering committee to make decisions around the level of contribution volatility the company might bear and therefore what level of asset-liability mismatch was appropriate. Depending on assumptions made there is about a one in 20 chance that within a 12-month period the pension deficit could increase by roughly £300m. It appeared that the largest risk lies with equity-type assets followed by exposure to interest rates, then inflation and finally life expectancy. Based on this analysis any hedging of life expectancy would seem low on the list of priorities.

However, the hedging of life expectancy (known as longevity risk) was identified as a key priority at an early stage. While it was accepted that other risks were more volatile and could have greater impact in the short run, the committee felt intuitively that longevity risk was far more significant than traditional risk modelling would indicate. Also, the scheme had already enacted a sizeable hedging programme for its interest rate and inflation risk in 2006 together with an ongoing diversification of its growth assets, so longevity remained the one risk for which nothing had been done to date.

Medical advances and health education have contributed to very significant increases in life expectancy, consistently exceeding actuarial assumptions made at a point in time (eg. a tri-annual valuation) and resulting in those assumptions being revised upwards in the future. Further, the rate of upward revision has also increased.

The committee felt that the long-term trend around longevity experience was clear and the risk of underestimating life expectancy was significant. Until very recently there were no solutions for hedging longevity risk in isolation, and total pension risk solutions (buy-out or buy-in) are either too expensive or unavailable for the vast majority of schemes. The committee was advised of potential limited market capacity for hedging longevity risk and the potential benefits of first-mover advantage given both capacity constraints and pricing.

IMPLEMENTATION Once ITV decided it wanted to explore the feasibility of hedging its longevity exposure, a joint working group of company and trustees was created with responsibility to negotiate and structure the transaction while acknowledging the final decisions would need to be taken by the company and trustees.

It was important that any potential providers saw that the transaction was desired by both the trustees and the company and that the "challenge process" was kept to manageable levels. Actual negotiations with the providers

would go through the company's and the trustees' investment advisers. Streamlining the negotiation channel this way gave tighter control over the transaction and ensured consistency of message.

Longevity protection providers were then approached. All were told that while the focus was on a standalone transfer of longevity risk there was interest in any variance they might suggest. The providers had enough differences in their offerings to ensure the solution would not be too wedded to a particular structure at the outset. The joint working group approached parties from both the insurance and banking market, parties that had previously structured interesting asset solutions, and parties that would not all go to the reinsurance market for their required hedging.

It became clear that the key differentiators other than price were:

- relative willingness to provide mitigants against a deteriorating credit by both overcollateralisation and break clauses;
- credit packages that would try to incorporate a level of double protection beyond a single counterparty;
- relative willingness to offer collateral where the longevity improvement factor reflected not just internal risk models but also the evolution of a traded market; and
- relative willingness to be flexible around early termination and assignment to third parties so that this trade in isolation did not adversely affect any ongoing management of the scheme towards long-term targets such as self-sufficiency or buy-out.

Once every offering had been examined to ensure it was truly deliverable, and initial indications of quotes had been received, what became clear was that none of the alternative structures that utilised different asset strategies really produced any additional value for the scheme, so it was decided to go with a standalone longevity swap. The basic flows of the transaction are summarised in Figure 1. Under the terms of the longevity swap, the pension scheme pays a predefined series of cashflows to Credit Suisse (the fixed leg), and Credit Suisse pays the actual pension benefits to the pension scheme (the floating leg). The transaction is fully collateralised to mitigate credit exposure. The fixed leg payable by the pension scheme is typically comprised of the best estimate projection of the pension amounts to be paid, plus a longevity hedging fee.

The potential cashflows for this transaction are represented in Figure 2. During the second round of bidding, the remaining counterparties optimised their offering by manipulating the shape of the cashflows to maximise the value to both the trustees and company, combining the best features of a derivative and insurance solution, maximising the value of the relationship that the provider might have with the company or trustees in other areas, and identifying areas where the cost of risk transfer might be prohibitive.

After the second round of bidding there was a preferred combination of structure and pricing, and timely execution brought pricing and terms in line with those indicated at the bidding stages.

OUTCOME ITV's pension scheme now has a longevity swap which covers most of its pensioner population and can add new pensioners as appropriate blocks are identified. The swap hedges the scheme's exposure to the risk that its pensioners live longer than currently anticipated and accounts for about 50% of ITV's total exposure to longevity. The impact of the swaps on the overall scheme deficit is an increase of around £50m on both accounting and funding basis, which equates to around a one-year change in life expectancy.

Figure 1: Hedge structure

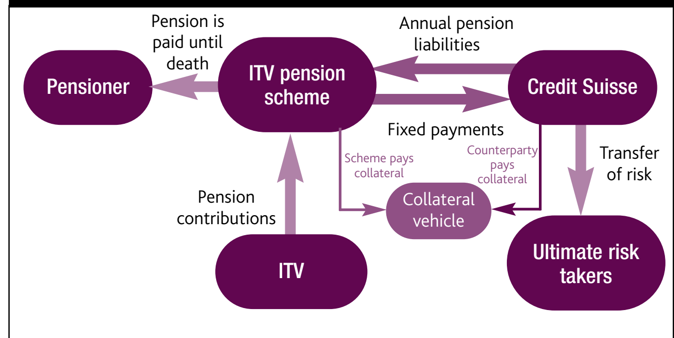
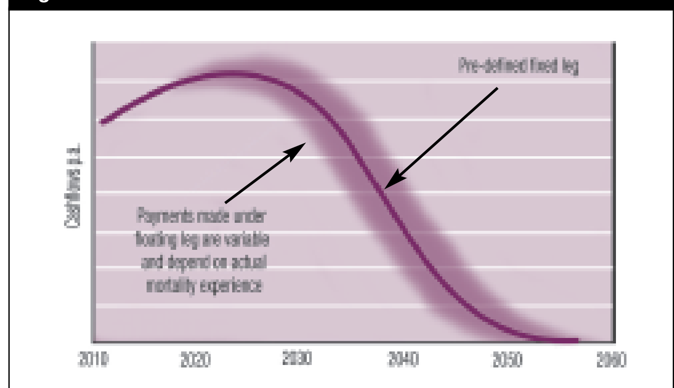


Figure 2: Potential cashflows



The SDN pension partnership agreed last year has been extended. The benefit of the extension is broadly equivalent to the impact on the funding deficit arising from the longevity swap contract. As a result, no further change is expected in ITV's contributions to the main section of the pension scheme before 2015. Given the seemingly unrelenting rise in life expectancy and potential increased cost as a result over a period as long as 70 years, the benefit of certainty at an acceptable cost to the scheme and company cannot be underestimated.

LESSONS LEARNED A longevity swap is like any other complicated structured finance transaction. Successful execution requires:

- the company to stay involved through the whole transaction and use all senior contacts to ensure no slippage in terms or conditions;
- the timetable to continue to hold all parties to account; and
- all stakeholders both inside and outside the company to feel part of the transaction.

It is important that the deal process takes into account the nascent state of this market and ensures that all iterations can be dealt with in a manner that does not derail the whole transaction.

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